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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/702,376

11/05/2003

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9896-000012

8364

27572 7590 03/20/2008  
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EXAMINER

RIYAMI, ABDULLA A

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

03/20/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/702,376	<b>Applicant(s)</b> LIU ET AL.	
	<b>Examiner</b> ABDULLAH RIYAMI	<b>Art Unit</b> 2616	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 January 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This is in response to an amendment/response filed on 01/21/2008.
2. Claims 1-7 have been amended.
3. Claims 8-17 have been added.
4. No claims have been cancelled.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1-7 are rejected under 35 U.S.C. 102(a) as being anticipated by Ramsden et al. (EP 1006 751 A2).

As per claim 1, Ramsden et al. discloses a flow control method for Virtual Container VC-Trunks in metropolitan-area network equipment (see paragraph 7 and column 11, paragraph 27, lines 30-33, see figures 1 and 4) comprising:  
determining, by a receiving-end equipment whether there is congestion at a VC- Trunk of the receiving-end equipment, if there is congestion at the VC-trunk sending out flow control packet with a VC-Trunk tag of the VC-Trunk to a transmission-end equipment (see paragraph 30, lines 50-52, and column 15, paragraph 32, lines 40-41);  
pausing, by the transmission-end equipment, a service transmission of the VC-trunk according to the VC-Trunk tag in the flow control packet (see paragraph 30, column 19, paragraph 37, lines 8-31).

As per claim 2, the flow control method further comprising, after pausing the service transmission of the VC- Trunk initiating, by the transmission-end equipment, a flow control timer at the transmission-end equipment if the flow control timer expires and no new flow control packet is received, then waiting resuming, by the transmission-end equipment, the service transmission of the VC-Trunk (inherent, see paragraph 37).

As per claim 3, the flow control method further comprising, wherein after sending the flow control packet with the VC-Trunk tag to the transmission-end equipment, initiating, by the receiving-end equipment, a flow control timer at the receiving-end equipment and sending the flow control packet in a timely manner until the congestion disappears (inherent, see paragraph 37).

As per claim 4, the flow control method comprising, the determining whether there is congestion at the VC-Trunk of the receiving-end equipment comprises, calculating, by the receiving-end equipment, the number of the service data packets received at the of every VC-Trunk and determining that there is congestion at the VC-Trunk if the whether said number exceeds a preset flow control threshold (see paragraphs 32 and 33).

As per claim 5, the flow control method comprising, the determining whether there is congestion at the VC-Trunk of the receiving-end equipment comprises, determining, by the receiving-end equipment, whether a First In First Out (FIFO) buffer of the VC-Trunk at the receiving-end transmission equipment is overflow and determining that there is congestion at the VC-Trunk if the FIFO buffer is overflow (see paragraph 32 and 33).

As per claim 6, the flow control method, wherein the flow control packet comprises

an 802.3x pause frame and the VC-Trunk tag as a header is added to 802.3x pause frame (see column 19, lines 3-5 and column 20, lines 9-15).

As per claim 7, the flow control method, wherein VC-Trunk tags correspond to VC-Trunks one by one, and a length of the VC-Trunk tag is determined by the number of VC-Trunks (see column 15, lines 8-16 and column 14, lines 5-10, (in virtual concatenation, each group representing the data packet for transmission is given an identifier)).

As per new independent claims 8 -7 are apparatus corresponding to amended method claim 1. Hence are rejected for the same reasons as set forth above regarding claim 1.

### ***Response to Arguments***

3. Applicant's arguments filed 01/21/2008 have been fully considered but they are not persuasive. Applicant argue that the prior art fail to teach "determining, by a receiving-end equipment, whether there is congestion at a VC-Trunk of the receiving-end equipment, if there is congestion at the VC-Trunk, sending a flow control packet with a VC-Trunk tag of the VC-Trunk to a transmission-end equipment; pausing, by the transmission-end equipment, service transmission of the VC-Trunk according to the VC-Trunk tag in the flow control packet" and that prior art does not take into consideration the flow control of an individual Virtual Container. Examiner respectfully disagrees with Applicant characterization of the prior art. Rams den et al. (EP 1006751 A2) does teach of determining by a receiving-end equipment (see figure 1), whether there is congestion

at a VC-Trunk of the receiving-end equipment (see paragraph 30, flow control and pause frame) if there is congestion at the VC-Trunk, sending a flow control packet with a VC-Trunk tag of the VC-Trunk to a transmission-end equipment (see paragraph 26, Ethernet standard 802.3 and paragraph 30, flow control and pause frame); pausing, by the transmission-end equipment, service transmission of the VC-Trunk according to the VC- Trunk tag in the flow control packet (see paragraph 24, 30 and 32). Ramsden et al. does take into consideration the flow control of an individual Virtual Container (see paragraph 30, lines 5-10, single virtual container).

4. For the reason above, the rejection is maintained.

### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ABDULLAH RIYAMI whose telephone number is (571)270-3119. The examiner can normally be reached on Monday through Thursday 8am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Firmin Backer can be reached on (571)272-6703. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Abdullah Riyami/  
Examiner, Art Unit 2616

/FIRMIN BACKER/  
Supervisory Patent Examiner, Art Unit 2616